BE6500 Wi-Fi 7 PCIe Adapter

AE65E

Key Features

- Wi-Fi 7 takes performance to the next level with faster speeds and greater capacity
- Tri-band (2.4 GHz/5 GHz/6 GHz) offers speed up to 6500 Mbps[1,2]
- Multi-Link Operation (MLO) connects across multiple bands simultaneously, improving reliability, reducing latency, and maximizing overall bandwidth
- Signal-boosting and multi-directional antenna design expands coverage
- Supports Bluetooth-compatible device communication featuring improved security and faster data rates
- Practical design with a built-in heatsink and a magnetized antenna base for desktop use and flexible placement
- Includes both standard and low-profile brackets to suit any motherboard or chassis size

User Benefits

Fast Connections

The latest Wi-Fi 7 technology enables real-time applications with high bandwidth and data rates

Tri-Band Connectivity

Experience the power of 2.4 GHz, 5 GHz, and 6 GHz bands for greater speeds and reduced congestion

Multi-Link Operation (MLO)

Uses multiple bands simultaneously for improved reliability, lower latency, and higher bandwidth

Powerful Signal, Wider Reach

Two external adjustable antennas deliver more efficient transmission and stable connectivity

Wireless Peripheral Support

Works with Bluetooth-compatible devices, such as keyboards, headphones, and other peripherals

Backwards Compatible

Works seamlessly with your existing Wi-Fi routers to ensure effortless interoperability and connectivity

WPA3 Encryption

Offers the latest Wi-Fi security protocols for better protection and safer connections

Instant Upgrade

Easily adds or upgrades wireless connectivity to desktop computers and servers with a simple setup

Technical Specifications

General	
Wireless Encryption	WPA WPA2 WPA3
Standards	IEEE 802.11be/ax (6 GHz) IEEE 802.11be/ax/ac/n/a (5 GHz) IEEE 802.11be/ax/n/g/b (2.4 GHz) IEEE 802.11k/v Compatible with Bluetooth 5.4
Wi-Fi Data Rate[1,2]	6 GHz up to 2882 Mbps 5 GHz up to 2882 Mbps 2.4 GHz up to 688 Mbps
Antenna Type	Two external dipole antennas • 5925-7125 MHz: 4.85 dBi • 5150-5850 MHz: 4.79 dBi • 2400-2500 MHz: 3.24 dBi
LED	Power, Status

Requirements	
Operating System[3]	Windows 11 (64 bit)
Interface	PCI Express connector (PCIe Gen 2) USB header connector[4]

Physical	
Dimensions[5]	121 x 79 x 25 mm (4.76 x 3.11 x 0.98 in)
Weight[6]	PCIe adapter only: 72.7 g (2.56 oz) External Antenna: 276.5 g (9.75 oz)
Power Consumption	6.6W
Operating Temperature	0 to 40 °C (32 to 103 °F)
Storage Temperature	-20 to 65˚ C (-4 to 149° F)
Operating Humidity	10% to 90% non-condensing
Storage Humidity	5% to 95% non-condensing
Certifications	FCC Class B CE IC

Package Contents	
AE65E	BE6500 Wi-Fi 7 PCIe Adapter 2 x External Tri-Band Antennas Magnetized Antenna Base with 1.5M (4.92ft) RF Cable Standard and Low Profile Bracket USB Header Cable Quick Installation Guide

1. Maximum wireless signal rate derived from IEEE Standard 802.11be/ax/ac/n/g/b/a specifications. Actual performance may vary due to settings, cabling, temperature, network configuration, interface, device compatibility, environmental and on-site conditions, and other similar factors. References to power capability, signal or processing speed, signal range or distance, data encryption, storage capacity, display properties, or other performance metrics are based on optimal conditions derived from industry standards and provided for informational purposes only.
2. Supported frequency bands are dependent on regional variants and may not be available in all markets.
3. Wi-Fi 7 functionality requires both a Wi-Fi 7–capable router (e.g. D-Link's M95, R95, M36, and R36 Wi-Fi 7 Smart Mesh Router) and operating system support. For Windows devices, Wi-Fi 7 is supported starting from Windows 11, version 24H2.
4. The USB box header can be connected for the optional Bluetooth support and should be connected to a corresponding 2x5-pin header on the motherboard.
5. PCB only.
6. Includes heatsink.

D-Link